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APPLICATION NO.	FILIN	IG DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/502,172	07/2	21/2004	Shin'Ichi Honma	DE20021	5519		
24737	7590	10/06/2005		EXAM	EXAMINER		
PHILIPS IN		ALEMU,	ALEMU, EPHREM				
P.O. BOX 30 BRIARCLIF		NY 10510		ART UNIT	ART UNIT PAPER NUMBER		
	, <b>,</b>			2821			

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	
	10/502,172	HONMA ET AL.	
Office Action Summary	Examiner	Art Unit	
	Ephrem Alemu	2821	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence add	ress
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tirr vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	I.  lely filed  the mailing date of this com  (35 U.S.C. § 133).	
Status			
<ul> <li>1) Responsive to communication(s) filed on 21 Ju</li> <li>2a) This action is FINAL. 2b) This</li> <li>3) Since this application is in condition for allowant closed in accordance with the practice under Exercise.</li> </ul>	action is non-final. ace except for formal matters, pro		nerits is
Disposition of Claims			
4) Claim(s) 1-11 is/are pending in the application.  4a) Of the above claim(s) is/are withdraw  5) Claim(s) is/are allowed.  6) Claim(s) 1-11 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or  Application Papers  9) The specification is objected to by the Examiner  10) The drawing(s) filed on is/are: a) acceed to the policient may not request that any objection to the objected to by the Examiner  Replacement drawing sheet(s) including the correction of the objected to by the Examiner	election requirement.  cpted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	37 CFR 1.85(a). ected to. See 37 CFR	• •
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori application from the International Bureau * See the attached detailed Office action for a list of	have been received. have been received in Application ty documents have been receive (PCT Rule 17.2(a)).	on No d in this National S	age
Attachment(s)  Notice of References Cited (PTO-892)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 7-21-04.	4) Interview Summary ( Paper No(s)/Mail Da 5) Notice of Informal Pa 6) Other:	te	52)

Application/Control Number: 10/502,172 Page 2

Art Unit: 2821

#### **DETAILED ACTION**

## Claim Objections

- 1. Claim 3 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim, or amend the claim to place the claim in proper dependent form, or rewrite the claim in independent form. Claim 3, the limitation "wherein the run-up phase (B1) comprises at least the interval from 0.5 s after ignition of the lamp (10) to 4 s after ignition of the lamp (10)" is an improper extension of the run-up phase being at least the interval from 1 s after ignition of the lamp (10) to 3 s after ignition of the lamp (10).
- 2. Claims 2 and 11 are objected to because of the following informalities: In claims 2 and 11, lines 4 and 11, respectively, change the misspelled word "valves" to --values--. Appropriate correction is required.

## Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in Ex

Application/Control Number: 10/502,172

Art Unit: 2821

parte Wu, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of Ex parte Steigewald, 131 USPQ 74 (Bd. App. 1961); Ex parte Hall, 83 USPQ 38 (Bd. App. 1948); and Ex parte Hasche, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 8 recites the broad recitation 75%, and the claim also recites 60% which is the narrower statement of the range/limitation.

#### Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1, 3-7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Huber et al. (US 5,74,132).

Re claims 1, 3 and 9, Huber discloses a lighting system comprising a gas discharge lamp (EL) and a control device (Fig. 2) for controlling the gas discharge lamp (140) with

a current supply device (i.e., switches S1-S4) for supplying the lamp with an alternating current of given amplitude (Fig. 2), and

a programming unit (i.e., control circuit C2) for providing amplitude values to the current supply device (i.e., switches S1-S4) during a run-up phase (Figs. 1, 2, Col. 3, line 50- Col. 4, line 13).

Art Unit: 2821

Huber further discloses the discharge lamps are supplied, in accordance with the prior art, with the run-up phase comprises at least the interval from 0.5 s after ignition of the lamp (i.e., high pressure discharge lamp EL) to 4 s after ignition of the lamp (i.e., high pressure discharge lamp EL), and the programming unit (i.e., control circuit C2) effectuates, in accordance with the prior art, a substantially rising gradient in time of the current (IL) during the run-up phase (T2') (Fig. 1; Col. 2, line 54- Col. 3, line 12).

Re claim 4, Huber shows in Fig. 1 the current (IL) rises by at least 30% in the run-up phase (T2') with respect to the value at the start of the phase.

Re claims 5 and 6, Huber shows in Fig. 1 the time gradient of the current (IL) in the runup phase (T2') rises monotonically averaged over time and the current (IL) is an alternating current with a substantially square-wave characteristic in time and a frequency of at least 200 Hz.

Re claim 7, Huber shows the current (IL) drops to a stationary value in a transition phase (T3') following the run-up phase (T2') (Col. 3, lines 3-16).

#### Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 2, 8, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huber et al. (US 5,742,132) in view of Ishizuka (US 6,163,115).

Re claims 2 and 11, Huber discloses a lighting system comprising a gas discharge lamp (EL) and a control device (Fig. 2) for controlling the gas discharge lamp (140) with

Application/Control Number: 10/502,172

Art Unit: 2821

a current supply device (i.e., switches S1-S4) for supplying the lamp with an alternating current of given amplitude (Fig. 2), and

a programming unit (i.e., control circuit C2) for providing amplitude values to the current supply device (i.e., switches S1-S4) during a run-up phase (Figs. 1, 2, Col. 3, line 50- Col. 4, line 13).

Huber further discloses the discharge lamps are supplied, in accordance with the prior art, with the run-up phase comprises at least the interval from 0.5 s after ignition of the lamp (i.e., high pressure discharge lamp EL) to 4 s after ignition of the lamp (i.e., high pressure discharge lamp EL), and the programming unit (i.e., control circuit C2) effectuates, in accordance with the prior art, a substantially rising gradient in time of the current (IL) during the run-up phase (T2') (Fig. 1; Col. 2, line 54- Col. 3, line 12).

Huber does not disclose the time gradient being chosen such that the luminous flux generated by the lamp (i.e., high pressure discharge lamp EL) achieves at least at two given moments assigned minimum values.

In the same field of endeavor, Ishizuka teaches of providing a high discharge lamp with an optimal power during the period of starting the discharge lamp in response to the discharge lamp tempreture (i.e., cold or hot) to allow the luminous flux rise certainly for the purpose of extending the life of the lamp (abstract; Figs. 1, 3; Col. 5, lines 29-56; Col. 11, lines 5-63; Col. 13, line 35- Col. 14, line 44).

It would have been within a skill of an artisan at the time the invention was made to modify the control circuit of Huber for providing the high discharge lamp with an optimal power during the period of starting the discharge lamp in response to the discharge lamp tempreture

Application/Control Number: 10/502,172

Art Unit: 2821

(i.e., cold or hot) to allow the luminous flux rise certainly for the purpose of extending the life of the lamp as taught by Ishizuka.

Re claim 8, given Huber modified by Ishizuka high pressure discharge lamp lighting apparatus system the current (IL) at the start of the run-up phase (T2') amounts to be less than 60% of the maximum value that the current assumes in the interval after 1 s after ignition would have been obvious since an optimal power is supplied during the period of starting the high pressure discharge lamp.

Re claim 10, Ishizuka further teaches of using high-pressure discharge lamp which does not contain mercury for the purpose of preventing environmental pollution (Col. 12, lines 38-50).

#### Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Prasad et al. (US 6,552,498); Shone et al. (US 6,160,362); and Paul et al. (US 5,677,602); also teach similar inventive subject matter.

## Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ephrem Alemu whose telephone number is (571) 272-1818. The examiner can normally be reached on M-F Flex hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don K Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

Art Unit: 2821

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EA 9-29-05

WILSON LEE
PRIMARY EXAMINER